

AMENDMENTS TO THE CLAIMS:

The following list of claims will replace all prior versions and listings of claims in the application.

LISTINGS OF CLAIMS:

1. (previously presented) A thermal control variable-speed circuit without switching noise, connected with a driving circuit, for controlling the rotation speed of a fan motor, comprising:

a reference voltage output circuit, which is connected to a power supply and outputs a corresponding reference voltage signal, wherein said reference voltage signal is changeable according to ambient temperature and said reference voltage output circuit comprises a first resistor, a thermistor and a second resistor, wherein one end of said thermistor is coupled to one end of the first resistor and the power supply and the other end of said thermistor is grounded, the other end of the first resistor outputs the reference voltage signal and is coupled to one end of the second resistor, and the other end of the second resistor is grounded; and

a driving voltage control circuit, which receives said reference voltage signal and outputs a corresponding driving voltage according to the amplitude of said reference voltage signal, wherein said driving voltage is proportional to said reference voltage signal and used to control the rotation speed of said fan motor.

2. (previously presented) The thermal control variable-speed circuit without switching noise as claimed in claim 1, wherein said one end of said thermistor is coupled with said power supply through

a third resistor having one end connected to said power supply; and

a fourth resistor having one end connected to the other end of said third resistor and the other end connected to said one end of said thermistor, wherein said thermistor has a negative temperature coefficient.

3. (previously presented) The thermal control variable-speed circuit without switching noise as claimed in claim 1, wherein said second resistor is a variable resistor.

4. (previously presented) The thermal control variable-speed circuit without switching noise as claimed in claim 2, wherein said driving voltage control circuit further comprises:

an operational amplifier having a non-inverted input end connected to a connection point between the first resistor and the second resistor for receiving said reference voltage signal;

a fifth resistor connected between an inverted input end of said operational amplifier and an output end of said operational amplifier;

a sixth resistor connected between the inverted input end of said operational amplifier and ground; and

a transistor having a base connected to said output end of said operational

amplifier, a collector connected to said power supply, and an emitter for outputting said driving voltage.

5. (previously presented) The thermal control variable-speed circuit without switching noise as claimed in claim 1, further comprising a capacitor connected to said driving circuit for filtering noises.

6. (previously presented) A thermal control variable-speed circuit without switching noise, connected with a driving circuit, for controlling the rotation speed of a fan motor, comprising:

a reference voltage output circuit, which is connected to a power supply and outputs a corresponding reference voltage signal, wherein said reference voltage signal is changeable according to ambient temperature and said reference voltage output circuit comprises a first resistor, a thermistor and a second resistor, wherein one end of the first resistor is coupled to the power supply and one end of the thermistor and the other end of the first resistor is coupled to one end of the second resistor, the other end of the thermistor is grounded, the other end of the second resistor is grounded and the reference voltage signal is outputted from a connection point between the first resistor and the second resistor; and

a driving voltage control circuit, which receives said reference voltage signal and outputs a corresponding driving voltage according to the amplitude of said reference voltage signal, wherein said driving voltage is proportional to

said reference voltage signal and used to control the rotation speed of said fan motor.

7. (previously presented) The thermal control variable-speed circuit without switching noise as claimed in claim 6, wherein said one end of the first resistor is coupled with said power supply through

a third resistor having one end connected to said power supply; and

a fourth resistor having one end connected to the other end of said third resistor and the other end connected to said one end of the first resistor.

8. (previously presented) The thermal control variable-speed circuit without switching noise as claimed in claim 6, wherein said second resistor is a variable resistor.

9. (previously presented) The thermal control variable-speed circuit without switching noise as claimed in claim 7, wherein said driving voltage control circuit further comprises:

an operational amplifier having a non-inverted input end connected to the connection point between the first resistor and the second resistor for receiving said reference voltage signal;

a fifth resistor connected between an inverted input end of said operational amplifier and an output end of said operational amplifier;

a sixth resistor connected between the inverted input end of said operational amplifier and ground; and

a transistor having a base connected to an output end of said operational amplifier, a collector connected to said power supply, and an emitter for outputting said driving voltage.

10. (previously presented) The thermal control variable-speed circuit without switching noise as claimed in claim 6, further comprising a capacitor connected to said driving circuit for filtering noises.

11. (canceled)